

## **EDITED TASK LISTING**

### **CLASS: MECHANICAL ENGINEER**

*NOTE: Each position within this classification may perform some or all of these tasks.*

1.	Designs, prepares and coordinates mechanical engineering drawings (e.g., heating, ventilating, air-conditioning (HVAC), refrigeration, plumbing, water supply and water purification systems, sanitary and drainage systems, and steam systems, etc.), specifications, and estimates in connection with the construction or maintenance of a variety of projects, including institutional and office buildings, roads, pumping plants, substations, radio stations, and similar structures using various resources (e.g., various computer hardware and software, hand drafting tools, personal experience, etc.) and building codes (e.g., California Building Code [CBC], National Fire Protection Association [NFPA], etc.) as needed and/or directed by immediate supervisor.
2.	Performs technical design review on projects at various stages (e.g., Capitol Outlay Budget Change Proposal [COBCP], Budget Packages, preliminary plans, working drawings, project reports, etc.) completed by other entities (e.g., Department of General Services [DGS], private consultants, institutions plant operations, etc.) in order to ensure conformity to building codes, Department of Correction's [CDC] design criteria guidelines, and construction suitability utilizing personal technical knowledge and experience as needed and/or directed by immediate supervisor.
3.	Performs material take-off and cost estimates of mechanical work on a wide variety of projects (e.g., heating, ventilating, air-conditioning (HVAC), refrigeration, plumbing, water supply and water purification systems, sanitary and drainage systems, and steam systems, etc.), to establish costs using various resources (e.g., various computer hardware and software, hand drafting tools, personal experience, etc.) and building codes (e.g., California Building Code [CBC], National Fire Protection Association [NFPA], etc.) as needed and/or directed by immediate supervisor.
4.	Reviews purchase requisitions for construction work regarding mechanical and plumbing equipment for a wide variety of projects, including institutional and office buildings, roads, pumping plants, substations, radio stations, and similar structures, etc. to ensure conformity to plans and specifications using personal experience, plans and specifications, as needed and/or directed by immediate supervisor.
5.	Performs inspections of mechanical engineering aspects of structures under construction and/or repair to ensure conformity to plans and specifications using personal experience, tape measures, plans, specifications, etc. as needed and/or directed by immediate supervisor.

## **EDITED TASK LISTING**

### **CLASS: MECHANICAL ENGINEER**

*NOTE: Each position within this classification may perform some or all of these tasks.*

<b>6.</b>	Conducts specialized investigations and technical studies to produce complete and comprehensive written reports and correspondence making recommendations on mechanical engineering issues (e.g., heating, ventilating, air-conditioning (HVAC), refrigeration, plumbing, water supply and water purification systems, sanitary and drainage systems, and steam systems, etc.) using various resources (e.g., various computer hardware and software, hand drafting tools, personal experience, etc.) and building codes, (e.g., California Building Code [CBC], National Fire Protection Association [NFPA], etc.) as needed and/or directed by immediate supervisor.
<b>7.</b>	Provides mechanical engineering construction support (e.g., submittal review, shop drawing review, change order review, responses to requests for information, consultation with construction supervisors, etc.) to a wide variety of projects including institutional and office buildings, roads, pumping plants, substations, radio stations, and similar structures, etc. to ensure conformity of plans and specifications using plans and specifications, personal experience, technical knowledge, building codes (e.g., California Building Code [CBC], National Fire Protection Association [NFPA], etc.) as needed and/or directed by immediate supervisor.
<b>8.</b>	Performs field surveys of existing mechanical engineering conditions for various construction projects including institutional and office buildings, roads, pumping plants, substations, radio stations, and similar structures, etc. to produce drawings, designs, and specifications using various resources (e.g., various computer hardware and software, hand drafting tools, personal experience, etc.) as needed and/or directed by the immediate supervisor.
<b>9.</b>	Represents the department, in formal or informal settings, regarding mechanical engineering matters at meetings, conferences, hearings, legal depositions, etc. to obtain or provide information and/or represent the interest of the department utilizing interpersonal skills, professionalism, personal knowledge, etc. as needed and/or upon request.
<b>10.</b>	Accurately interpret and apply laws, rules, regulations, departmental policies and procedures, etc. regarding mechanical engineering issues in order to gain an understanding and apply as needed and/or upon request.
<b>11.</b>	Appropriately handle stressful situations in the work place, in a professional and tactful manner, with a goal of avoiding further escalation by utilizing effective interpersonal skills per departmental policies as needed.